OBSERVATIONS & RECOMMENDATIONS

After reviewing data collected from **OTTER POND, SUNAPEE,** the program coordinators recommend the following actions. *Thank you for your diligent sampling efforts this summer! This amount of data enables us to more accurately establish water quality trends for the pond.*

FIGURE INTERPRETATION

- Figure 1: These graphs illustrate concentrations of chlorophyll-a in the water column. Algae are microscopic plants that are a natural part of lake ecosystems. Algae contain chlorophyll-a, a pigment necessary for photosynthesis. A measure of chlorophyll-a can indicate the abundance of algae in a lake. The historical data (the bottom graph) show a *stabilizing* in-lake chlorophyll-a trend. The mean chlorophyll concentration was elevated this season. Algal abundance in June was the highest the lake has experienced in over ten years, though levels remained below the NH mean value. The increase in rain the state experienced could have washed excess nutrients into the lake, which encouraged algal growth by June. By July, chlorophyll concentrations had recovered and remained stable in August and September. While algae are present in all lakes, an excess amount of any type is not welcomed. Concentrations can increase when there are external and internal sources of phosphorus, which is the nutrient algae depend upon for growth. It's important to continue the education process and keep residents aware of the sources of phosphorus and how it influences lake quality.

- Figure 2: Water clarity is measured by using a Secchi disk. Clarity, or transparency, can be influenced by such things as algae, sediments from erosion, and natural colors of the water. The graphs on this page show historical and current year data. The lower graph shows a *stable* trend in lake transparency. The lake experienced a decrease in water clarity this season. The road construction combined with the rainfall could have caused an increase in the amount of suspended material washed into the lake, which can decrease transparency. The 2000 sampling season was considered to be wet and, therefore, average transparency readings are expected to be slightly lower than last year's readings. Higher amounts of rainfall usually cause more eroding of sediments into the lake and streams, thus decreasing clarity.

- Figure 3: These figures show the amounts of phosphorus in the epilimnion (the upper layer in the lake) and the hypolimnion (the lower layer); the inset graphs show current year data. Phosphorus is the limiting nutrient for plants and algae in New Hampshire waters. Too much phosphorus in a lake can lead to increases in plant growth over time. These graphs show a *stabilizing* trend for the upper water layer, and a *slightly improving* trend for the lower water layer. Phosphorus concentrations in the epilimnion were higher in August and September, but did not seem to cause an increase in algal growth. Phosphorus concentrations in the hypolimnion were relatively stable as the summer progressed. Mean hypolimnetic phosphorus concentrations have remained below the NH median for over ten years, and are still improving! This is a positive sign for the lake and we hope to see a continuation of this trend. One of the most important approaches to reducing phosphorus levels is educating the public. Humans introduce phosphorus to lakes by several means: fertilizing lawns, septic system failures, and detergents containing phosphates are just a few. Keeping the public aware of ways to reduce the input of phosphorus to lakes means less productivity in the lake. Contact the VLAP coordinator for tips on educating your lake residents or for ideas on testing your watershed for phosphorus inputs.

OTHER COMMENTS

- **Please note** in July, phosphorus levels were found to be less than 5 µg/L in the epilimnion, Baptist Bk., Little Sunapee Bk., and the Outlet. The NHDES Laboratory Services adopted a new method of analyzing total phosphorus this year and the lowest value that can be recorded is less than 5 µg/L. If this caused an increase in the average phosphorus at any of these stations we would like to remind the association that a reading of 5 µg/L is considered low for New Hampshire's waters.

- Conductivity (Table 6) decreased at all sites tested this year, most likely as a result of the increased rainfall the state experienced. This increased the flushing rate of the pond, which decreased the build up of excess nutrients. Conductivities continue to be higher than desirable for the pond, and conductivity increases often indicate the influence of human activities on surface waters. Septic system leachate, agricultural runoff, iron deposits, and road runoff can each influence conductivity readings. It would be useful to uncover the reasons for high conductivity as we continue to monitor Otter Pond.

- Dissolved oxygen was depleted in the last meter of the lake in July this season (Table 9). The process of decomposition in the sediments depletes dissolved oxygen on the bottom of thermally stratified lakes. As bacteria break down organic matter, they deplete oxygen in the water. When oxygen gets below 1 mg/L, phosphorus normally bound up in the mud may be released into the water column, a process that

is referred to as *internal loading*. Depleted oxygen in the hypolimnion usually occurs as the summer progresses. However phosphorus concentrations remain at a healthy level. This is most likely due to the testing depth of the hypolimnion being at 6 meters, and we have not seen oxygen depletion at that depth yet. We recommend scheduling your annual visit with the VLAP coordinator in August so that a dissolved oxygen profile can be performed later in the summer. This will allow us to track the process of dissolved oxygen depletion, and discover if oxygen is depleted further in the water column.

- *E. coli* originates in the intestines of warm-blooded animals (including humans) and is an indicator of associated and potentially harmful pathogens. Bacteria concentrations were all very low at the site tested (Table 12). If residents are concerned about septic system impacts, testing when the water table is high or after rains is best. Please consult the Other Monitoring Parameters section of the report for the current standards for *E. coli* in surface waters.

- Native milfoil was discovered in Otter Pond this summer. We encourage volunteers to continue to monitor the vegetation in the pond. For more information, contact Amy Smagula at (603) 271-2248.

NOTES

- Monitor's Note (7/25/00): Construction on 12A off of 89. Purple loosestrife abundant around Baptist Bk.

- Biologist's Note (7/25/00): Weed identified as Native Milfoil.

USEFUL RESOURCES

Soil Erosion and Sediment Control on Construction Sites, WD-WEB-12, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

Erosion Control for Construction in the Protected Shoreland Buffer Zone, WD-BB-30, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

The Wetlands Resource, WD-WB-7, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

Bacteria in Surface Waters, WD-BB-14, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

Septic Systems and Your Lake's Water Quality, WD-BB-11, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

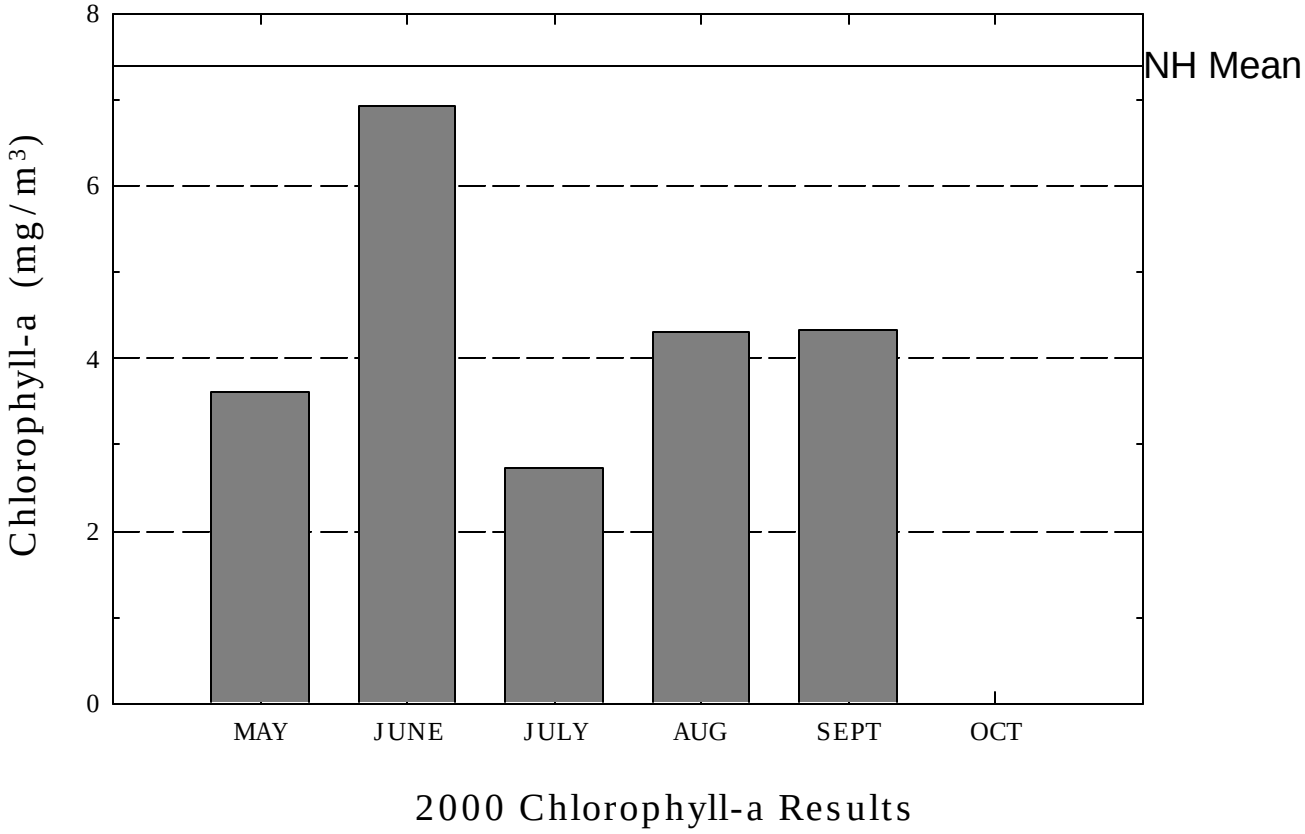
Phosphorus in Lakes, WD-BB-20, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

Through the Looking Glass: A Field Guide to Aquatic Plants. North American Lake Management Society, 1988. (608) 233-2836 or www.nalms.org

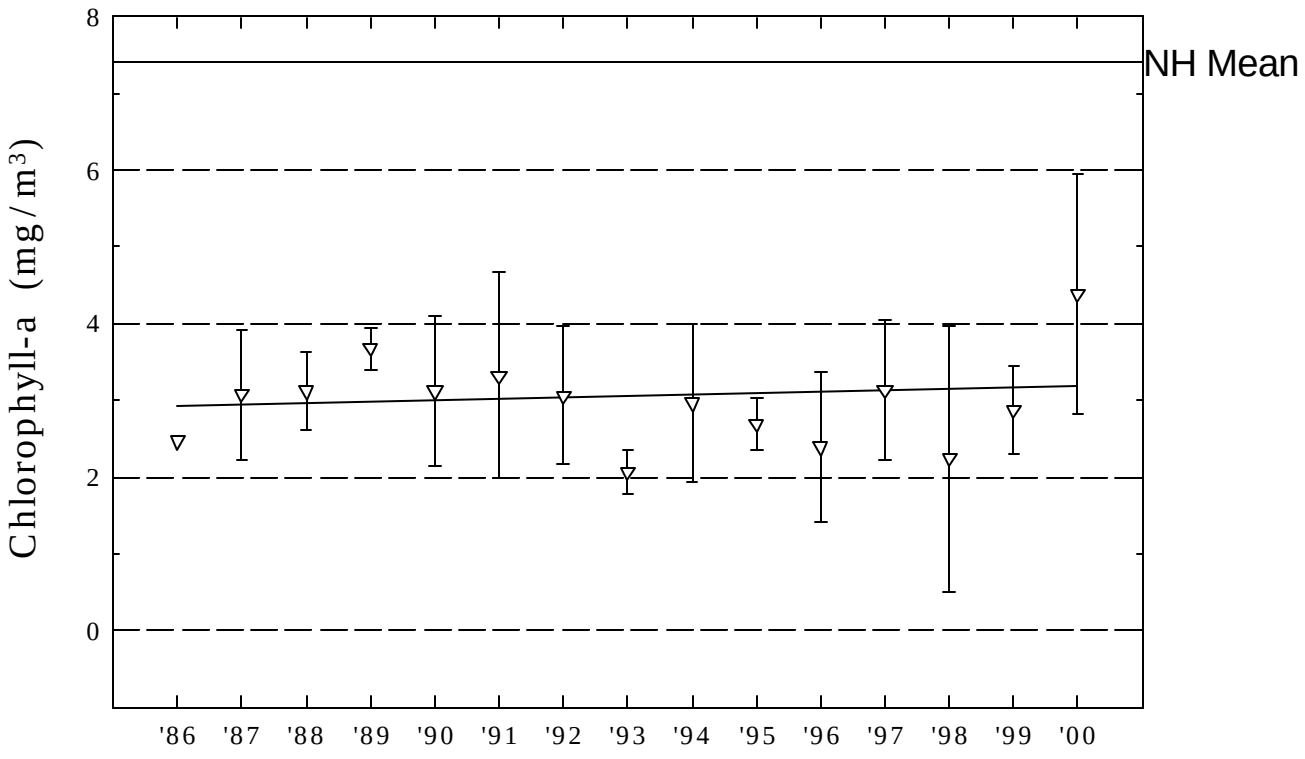
Weed Watchers: An Association to Halt the Spread of Exotic Aquatic Plants, WD-BB-4, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

Otter Pond

Figure 1. Monthly and Historical Chlorophyll-a Results



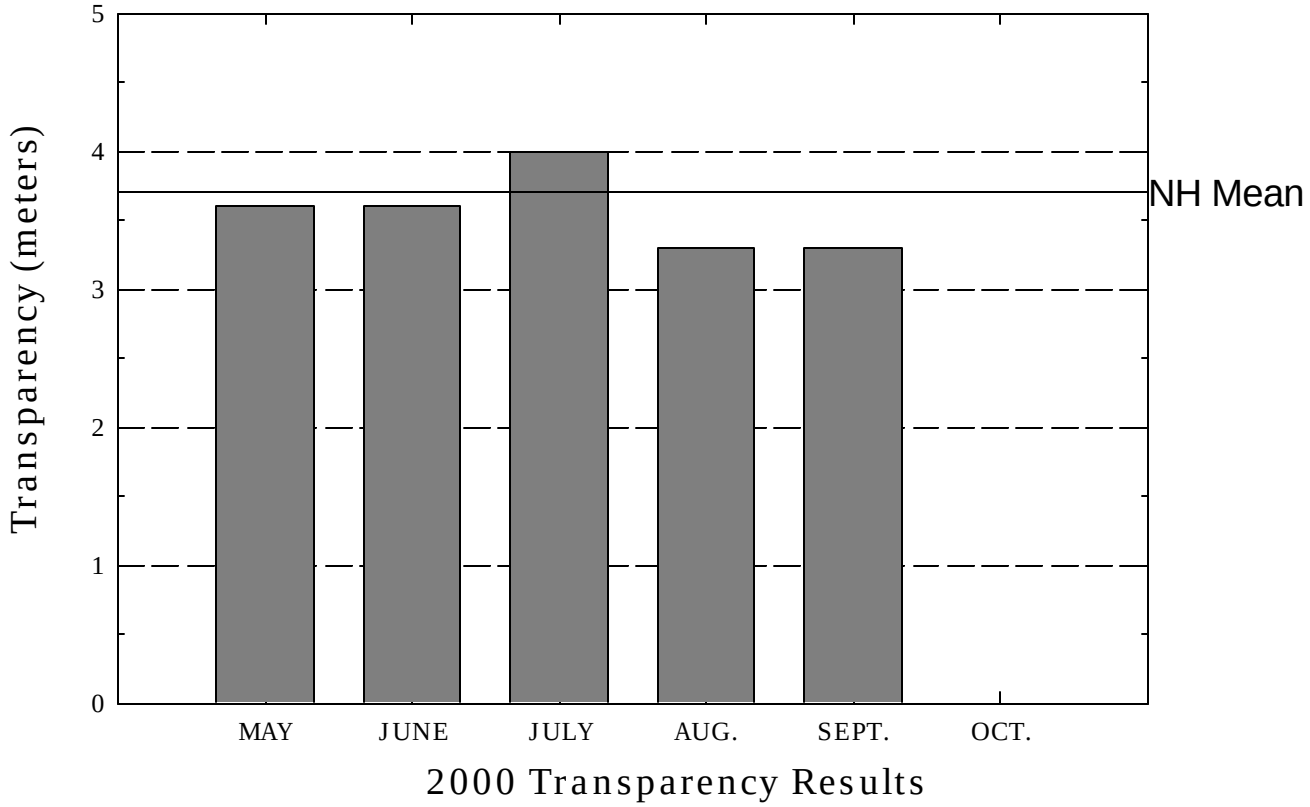
2000 Chlorophyll-a Results

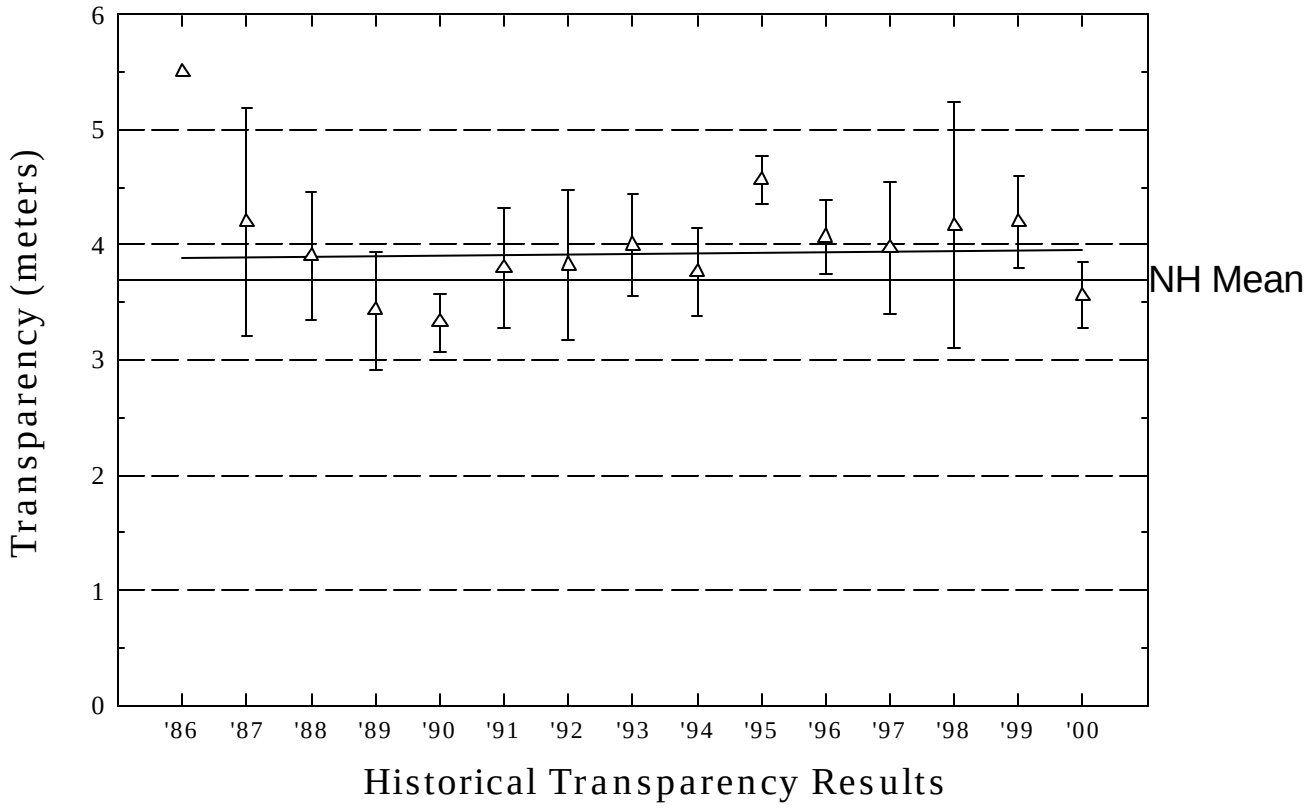


Historical Chlorophyll-a Results

Otter Pond

Figure 2. Monthly and Historical Transparency Results





Otter Pond

Figure 3. Monthly and Historical Total Phosphorus Data.

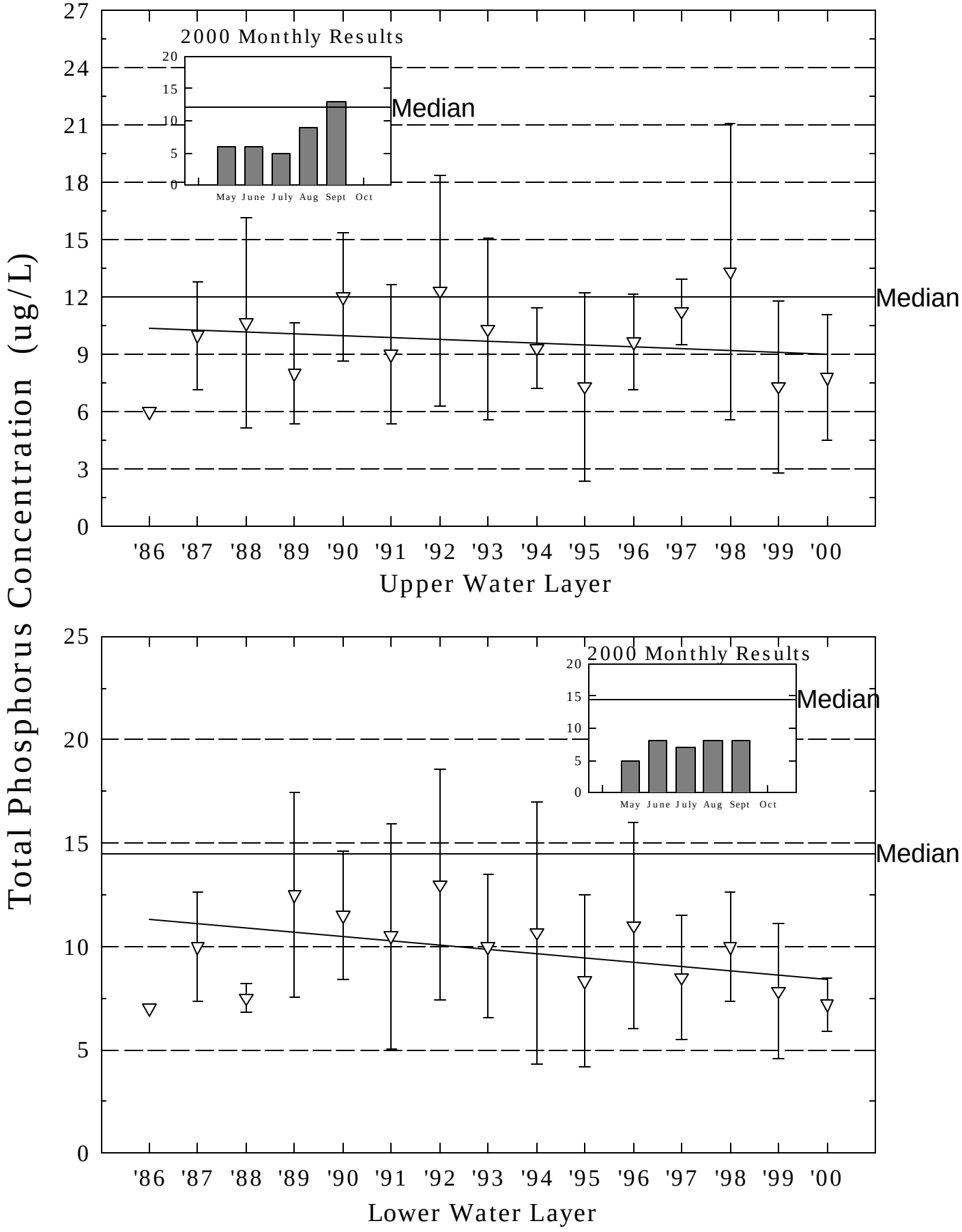


Table 1.

OTTER POND

SUNAPEE

Chlorophyll-a results (mg/m^3) for current year and historical sampling periods.

Year	Minimum	Maximum	Mean
1986	2.47	2.47	2.47
1987	2.48	3.68	3.08
1988	2.74	3.71	3.12
1989	3.48	3.99	3.68
1990	2.08	4.24	3.12
1991	1.81	4.91	3.32
1992	2.18	4.53	3.35
1993	1.83	2.37	2.09
1994	1.83	3.81	2.97
1995	2.45	2.94	2.65
1996	1.26	4.77	3.15
1997	1.99	4.17	3.13
1998	1.09	4.62	2.83
1999	1.45	3.44	2.59
2000	2.73	6.92	4.38

Table 2.

OTTER POND

SUNAPEE

Phytoplankton species and relative percent abundance.

Summary for current and historical sampling seasons.

Date of Sample	Species Observed	Relative % Abundance
09/03/1986	MELOSIRA	26
	DINOBRYON	23
	TABELLARIA	10
08/13/1987	ASTERIONELLA	63
	DINOBRYON	14
05/20/1988	MELOSIRA	42
	TABELLARIA	23
07/22/1988	ASTERIONELLA	20
07/09/1990	ASTERIONELLA	92
07/10/1991	DINOBRYON	70
	COELOSPHAERIUM	12
	ASTERIONELLA	8
08/14/1991	COELSOPHAERIUM	29
	ASTERIONELLA	24
	CHRYSOSPHAERELLA	13
08/27/1993	COELOSPHAERIUM	39
	TABELLARIA	21
06/21/1994	DINOBRYON	80
	UROGLENOPSIS	10
05/09/1995	TABELLARIA	54
	MELOSIRA	16
	DINOBRYON	11
06/26/1996	ASTERIONELLA	81
	SYNURA	13
	DINOBRYON	3

Table 2.

OTTER POND

SUNAPEE

Phytoplankton species and relative percent abundance.

Summary for current and historical sampling seasons.

Date of Sample	Species Observed	Relative % Abundance
06/25/1997	CYCLOTELLA	43
	DINOBRYON	30
	TABELLARIA	6
07/13/1998	CHRYSOSPHAERELLA	62
	DINOBRYON	30
	ASTERIONELLA	3
07/25/2000	DINOBRYON	71
	ASTERIONELLA	10
	RHIZOSOLENIA	8

Table 3.

OTTER POND

SUNAPEE

Summary of current and historical Secchi Disk transparency results (in meters).

Year	Minimum	Maximum	Mean
1986	5.5	5.5	5.5
1987	3.5	4.9	4.2
1988	3.4	4.5	3.9
1989	3.0	4.0	3.4
1990	3.2	3.7	3.3
1991	3.2	4.2	3.8
1992	3.2	4.7	3.8
1993	3.7	4.9	4.2
1994	3.5	4.2	3.7
1995	4.4	4.8	4.5
1996	3.6	4.3	3.9
1997	3.3	4.7	3.9
1998	3.5	5.4	4.3
1999	3.8	4.8	4.1
2000	3.3	4.0	3.5

Table 4.

OTTER POND

SUNAPEE

pH summary for current and historical sampling seasons.
Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
BAPTIST BK				
	1986	6.45	6.45	6.45
	1987	6.51	6.74	6.60
	1988	6.55	6.72	6.63
	1989	6.05	6.65	6.25
	1990	6.60	6.74	6.65
	1991	6.40	6.70	6.59
	1992	6.15	6.77	6.50
	1993	6.37	6.73	6.56
	1994	6.64	6.66	6.65
	1995	6.62	6.66	6.65
	1996	6.39	6.73	6.53
	1997	6.37	6.65	6.51
	1998	6.51	6.68	6.58
	1999	6.50	6.61	6.57
	2000	6.50	6.72	6.58
BEACH				
	1987	6.93	6.93	6.93
DAN GEO COTTAGES				
	1987	6.91	6.91	6.91
EPILIMNION				
	1986	6.94	6.94	6.94
	1987	6.69	6.81	6.75
	1988	6.67	6.85	6.77

Table 4.

OTTER POND

SUNAPEE

pH summary for current and historical sampling seasons.
Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
	1989	6.14	6.89	6.47
	1990	6.53	6.90	6.70
	1991	6.90	6.99	6.95
	1992	6.25	6.87	6.61
	1993	6.71	6.94	6.83
	1994	6.56	6.91	6.72
	1995	6.91	7.28	7.01
	1996	6.57	6.92	6.75
	1997	6.59	7.03	6.74
	1998	6.70	6.85	6.76
	1999	6.10	6.75	6.43
	2000	6.53	6.97	6.68
HYPOLIMNION				
	1986	6.81	6.81	6.81
	1987	6.67	6.84	6.75
	1988	4.78	6.71	5.08
	1989	6.22	6.22	6.22
	1990	6.35	6.74	6.56
	1991	6.42	6.98	6.73
	1992	5.95	7.00	6.41
	1993	6.56	6.85	6.71
	1994	6.25	6.57	6.35
	1995	6.73	7.08	6.92
	1996	6.27	6.74	6.49
	1997	6.25	6.89	6.60
	1998	6.22	6.65	6.43

Table 4.

OTTER POND

SUNAPEE

pH summary for current and historical sampling seasons.
Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
	1999	6.49	6.82	6.64
	2000	6.29	6.54	6.45
LITTLE SUNAPEE BK				
	1986	6.68	6.68	6.68
	1987	6.68	6.71	6.70
	1988	6.67	6.79	6.74
	1989	6.40	6.75	6.54
	1990	6.50	6.85	6.64
	1991	6.70	6.90	6.82
	1992	6.35	6.91	6.65
	1993	6.56	6.88	6.71
	1994	6.62	6.84	6.69
	1995	6.83	7.19	7.00
	1996	6.49	6.90	6.68
	1997	6.47	6.77	6.64
	1998	6.52	6.77	6.64
	1999	6.62	6.89	6.68
	2000	6.58	6.84	6.69
METALIMNION				
	1989	6.04	6.80	6.27
	1990	6.74	6.74	6.74
	1994	6.40	6.88	6.58
	1997	6.32	6.32	6.32

Table 4.

OTTER POND

SUNAPEE

pH summary for current and historical sampling seasons.
Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
OUTLET				
	1986	6.82	6.82	6.82
	1987	6.70	6.84	6.74
	1988	6.43	6.81	6.64
	1989	6.21	6.87	6.43
	1990	6.53	6.74	6.64
	1991	6.90	7.00	6.93
	1992	6.40	6.95	6.70
	1993	6.50	6.84	6.71
	1994	6.61	6.80	6.68
	1995	6.81	7.13	6.90
	1996	6.55	9.96	6.84
	1997	6.56	6.77	6.68
	1998	6.61	6.77	6.69
	1999	6.58	7.05	6.75
	2000	6.44	6.74	6.63
STAR LAKE INLET				
	1987	6.10	6.54	6.26
	1988	6.08	6.47	6.29
	1989	5.84	6.27	6.00
	1990	6.05	6.32	6.16
	1991	6.28	6.60	6.41
	1992	6.15	6.60	6.40
	1993	6.25	6.88	6.52
	1994	6.23	6.33	6.28

Table 4.

OTTER POND

SUNAPEE

pH summary for current and historical sampling seasons.
Values in units, listed by station and year.

Station	Year	Minimum	Maximum	Mean
	1995	6.43	6.82	6.62
	1996	6.24	6.55	6.34
	1997	6.04	6.52	6.17
	1998	6.22	6.57	6.34
	1999	6.17	6.54	6.33
	2000	6.07	6.33	6.21

Table 5.

OTTER POND

SUNAPEE

Summary of current and historical Acid Neutralizing Capacity.
Values expressed in mg/L as CaCO .

Epilimnetic Values

Year	Minimum	Maximum	Mean
1986	5.20	5.20	5.20
1987	5.60	5.60	5.60
1988	4.50	5.30	4.90
1989	4.30	5.80	4.93
1990	3.10	5.10	3.75
1991	4.30	5.30	4.73
1992	4.20	5.50	4.84
1993	3.50	5.20	4.38
1994	4.30	5.50	4.70
1995	4.50	5.50	5.17
1996	4.20	5.80	4.84
1997	4.70	6.20	5.10
1998	3.80	5.60	4.97
1999	3.20	5.00	3.97
2000	4.50	5.60	4.92

Table 6.

OTTER POND

SUNAPEE

Specific conductance results from current and historic sampling seasons. Results in uMhos/cm.

Station	Year	Minimum	Maximum	Mean
BAPTIST BK				
	1986	273.5	273.5	273.5
	1987	128.7	283.0	190.8
	1988	126.1	241.5	169.4
	1989	110.6	156.2	132.1
	1990	90.5	178.5	130.7
	1991	121.2	200.0	158.6
	1992	29.7	199.2	153.0
	1993	168.0	252.0	199.8
	1994	115.3	131.6	122.8
	1995	136.7	527.0	385.5
	1996	110.4	341.0	197.7
	1997	130.5	588.0	345.8
	1998	137.7	247.0	176.0
	1999	103.2	472.0	263.4
	2000	133.2	161.7	142.7
BEACH				
	1987	89.9	89.9	89.9
DAN GEO COTTAGES				
	1987	89.0	89.0	89.0
EPILIMNION				
	1986	93.5	93.5	93.5
	1987	85.5	86.9	86.2
	1988	83.3	95.5	89.5
	1989	88.9	96.8	92.3

Table 6.

OTTER POND

SUNAPEE

Specific conductance results from current and historic sampling seasons. Results in uMhos/cm.

Station	Year	Minimum	Maximum	Mean
	1990	72.4	101.1	85.2
	1991	86.7	94.5	90.3
	1992	93.8	105.7	101.8
	1993	97.6	109.6	105.3
	1994	88.7	96.6	91.4
	1995	101.9	114.6	109.1
	1996	84.1	92.3	87.3
	1997	87.0	108.4	96.8
	1998	96.1	107.7	101.8
	1999	106.5	132.1	119.0
	2000	103.4	112.8	108.0
HYPOLIMNION				
	1986	94.7	94.7	94.7
	1987	85.5	87.9	87.1
	1988	95.4	133.8	114.6
	1989	95.9	97.2	96.5
	1990	74.6	85.2	81.0
	1991	87.0	97.5	91.2
	1992	93.6	105.5	101.5
	1993	96.1	108.2	104.0
	1994	89.1	92.8	90.9
	1995	102.1	114.4	109.2
	1996	82.3	92.2	86.2
	1997	85.2	108.3	95.7
	1998	97.6	107.6	103.1

Table 6.

OTTER POND

SUNAPEE

Specific conductance results from current and historic sampling seasons. Results in uMhos/cm.

Station	Year	Minimum	Maximum	Mean
	1999	107.3	130.8	119.2
	2000	103.4	113.6	108.2
LITTLE SUNAPEE BK				
	1986	116.8	116.8	116.8
	1987	69.6	128.1	95.0
	1988	77.3	99.5	91.4
	1989	77.3	106.8	89.4
	1990	76.5	90.7	82.9
	1991	83.5	162.1	118.8
	1992	83.3	131.6	99.4
	1993	94.2	168.5	120.7
	1994	80.7	126.1	96.3
	1995	91.6	152.8	125.3
	1996	77.4	210.0	117.2
	1997	74.9	173.6	125.8
	1998	86.2	169.7	109.1
	1999	102.2	265.0	152.0
	2000	93.0	155.2	111.4
METALIMNION				
	1989	88.4	97.0	92.0
	1990	84.7	84.7	84.7
	1994	88.3	95.7	92.0
	1997	88.2	88.2	88.2

Table 6.

OTTER POND

SUNAPEE

Specific conductance results from current and historic sampling seasons. Results in uMhos/cm.

Station	Year	Minimum	Maximum	Mean
OUTLET				
	1986	96.6	96.6	96.6
	1987	86.5	90.9	88.4
	1988	84.2	96.8	90.6
	1989	88.8	95.3	91.8
	1990	73.8	87.8	81.5
	1991	86.4	94.7	91.7
	1992	48.2	109.8	91.7
	1993	98.5	108.5	105.2
	1994	89.7	96.7	92.3
	1995	104.9	114.9	110.3
	1996	84.1	92.2	87.0
	1997	86.9	103.4	93.9
	1998	94.8	108.4	102.5
	1999	108.6	131.4	121.1
	2000	104.3	113.1	109.0
STAR LAKE INLET				
	1987	52.3	85.5	66.8
	1988	68.5	229.8	126.5
	1989	62.8	119.1	96.0
	1990	51.2	73.7	62.6
	1991	73.4	170.2	115.3
	1992	85.2	217.3	122.8
	1993	96.6	404.0	261.6
	1994	72.3	292.0	152.9

Table 6.

OTTER POND

SUNAPEE

Specific conductance results from current and historic sampling seasons. Results in uMhos/cm.

Station	Year	Minimum	Maximum	Mean
	1995	70.3	92.3	78.3
	1996	53.0	123.6	81.7
	1997	56.8	109.7	81.0
	1998	79.2	95.8	88.1
	1999	93.9	362.8	192.3
	2000	87.0	111.0	94.7

Table 8.

OTTER POND

SUNAPEE

Summary historical and current sampling season Total Phosphorus data. Results in ug/L.

Station	Year	Minimum	Maximum	Mean
BAPTIST BK				
	1986	4	4	4
	1987	5	10	7
	1988	2	11	6
	1989	7	73	40
	1990	9	11	9
	1991	4	9	7
	1992	4	10	6
	1993	3	8	6
	1994	9	11	9
	1995	2	10	6
	1996	4	28	12
	1997	2	6	4
	1998	5	7	5
	1999	5	9	7
	2000	< 5	11	4
BEACH				
	1987	13	13	13
EPILIMNION				
	1986	6	6	6
	1987	8	12	10
	1988	7	17	10
	1989	5	10	8
	1990	10	17	12
	1991	5	13	9

Table 8.

OTTER POND

SUNAPEE

Summary historical and current sampling season Total Phosphorus data. Results in ug/L.

Station	Year	Minimum	Maximum	Mean
	1992	6	18	10
	1993	5	19	12
	1994	7	11	9
	1995	4	13	7
	1996	7	12	10
	1997	9	13	11
	1998	7	22	12
	1999	3	16	7
	2000	< 5	13	7
HYPOLIMNION				
	1986	7	7	7
	1987	7	12	10
	1988	7	8	7
	1989	9	16	12
	1990	9	16	11
	1991	5	18	10
	1992	7	18	11
	1993	7	14	9
	1994	7	18	10
	1995	5	13	8
	1996	5	16	9
	1997	5	11	8
	1998	8	13	10
	1999	3	11	7
	2000	5	8	7

Table 8.

OTTER POND

SUNAPEE

Summary historical and current sampling season Total Phosphorus data. Results in ug/L.

Station	Year	Minimum	Maximum	Mean
LITTLE SUNAPEE BK				
	1986	6	6	6
	1987	6	11	9
	1988	4	13	7
	1989	7	13	9
	1990	5	9	7
	1991	6	12	8
	1992	5	11	7
	1993	8	12	10
	1994	8	18	14
	1995	3	8	5
	1996	9	27	16
	1997	4	7	5
	1998	3	4	3
	1999	4	24	9
	2000	< 5	6	3
METALIMNION				
	1989	9	12	10
	1990	11	11	11
	1994	6	7	6
	1997	10	10	10
OUTLET				
	1986	5	5	5
	1987	5	10	7
	1988	2	6	4

Table 8.

OTTER POND

SUNAPEE

Summary historical and current sampling season Total Phosphorus data. Results in ug/L.

Station	Year	Minimum	Maximum	Mean
	1989	5	13	8
	1990	5	13	8
	1991	4	8	5
	1992	5	56	19
	1993	5	7	5
	1994	3	17	9
	1995	3	10	6
	1996	4	29	11
	1997	6	7	6
	1998	2	23	9
	1999	3	9	6
	2000	< 5	10	4
STAR LAKE INLET				
	1987	11	14	12
	1988	7	36	18
	1989	11	28	19
	1990	9	21	13
	1991	12	27	20
	1992	11	18	14
	1993	16	24	18
	1994	9	23	14
	1995	12	19	15
	1996	9	96	40
	1997	5	22	13
	1998	4	11	8

Table 8.

OTTER POND

SUNAPEE

Summary historical and current sampling season Total Phosphorus data. Results in ug/L.

Station	Year	Minimum	Maximum	Mean
	1999	5	38	19
	2000	2	12	6

Table 9.

OTTER POND

SUNAPEE

Current year dissolved oxygen and temperature data.

Depth (meters)	Temperature (celsius)	Dissolved Oxygen (mg/L)	Saturation (%)
		July 25, 2000	
0.1	22.1	8.6	98.4
1.0	22.0	8.4	95.8
2.0	21.8	8.5	96.2
3.0	21.4	8.4	95.5
4.0	21.2	8.2	92.8
5.0	20.3	7.4	81.6
6.0	18.2	3.1	33.2
7.0	14.4	0.2	1.8

Table 10.

OTTER POND

SUNAPEE

Historic Hypolimnetic dissolved oxygen and temperature data.

Date	Depth (meters)	Temperature (celsius)	Dissolved Oxygen (mg/L)	Saturation (%)
September 3, 1986	6.5	17.8	6.8	69.0
August 13, 1987	6.0	19.0	0.2	2.0
May 20, 1988	7.0	9.4	1.6	14.0
July 22, 1988	7.0	15.8	0.0	0.0
July 20, 1989	7.5	11.8	1.9	17.0
July 9, 1990	7.0	13.8	2.4	23.2
July 10, 1991	7.3	15.0	0.0	0.0
June 30, 1992	7.0	12.0	3.2	29.6
August 27, 1993	7.0	20.1	4.1	45.0
June 21, 1994	7.0	13.7	4.9	46.0
May 9, 1995	7.0	10.0	11.5	101.0
June 26, 1996	7.0	11.8	0.8	7.0
June 25, 1997	7.0	12.0	3.5	32.0
July 13, 1998	7.0	15.3	2.0	20.0
June 22, 1999	6.5	15.5	7.4	72.0
July 25, 2000	7.0	14.4	0.2	1.8

Table 11.

OTTER POND

SUNAPEE

Summary of current year and historic turbidity sampling.
Results in NTU's.

Station	Year	Minimum	Maximum	Mean
BAPTIST BK				
	1995	1.0	4.9	2.5
	1996	0.9	4.3	2.2
	1997	0.8	1.3	0.9
	1998	0.6	2.0	1.3
	1999	0.8	1.9	1.6
	2000	0.6	1.9	1.2
EPILIMNION				
	1995	0.6	0.9	0.7
	1996	0.4	1.1	0.9
	1997	0.3	1.4	0.9
	1998	0.3	1.0	0.6
	1999	0.4	1.3	0.8
	2000	0.3	1.8	1.0
HYPOLIMNION				
	1995	0.7	0.9	0.8
	1996	1.0	1.1	1.0
	1997	0.4	1.0	0.8
	1998	0.4	1.3	0.8
	1999	0.6	1.2	0.9
	2000	0.6	1.2	0.8
LITTLE SUNAPEE BK				
	1995	0.2	0.6	0.4
	1996	0.0	0.9	0.4
	1997	0.2	3.4	1.1

Table 11.

OTTER POND

SUNAPEE

Summary of current year and historic turbidity sampling.
Results in NTU's.

Station	Year	Minimum	Maximum	Mean
	1998	0.1	0.7	0.4
	1999	0.2	0.8	0.5
	2000	0.1	1.2	0.5
METALIMNION				
	1997	0.3	0.3	0.3
OUTLET				
	1995	0.5	8.0	3.0
	1996	0.6	1.1	0.8
	1997	0.6	0.9	0.7
	1998	0.2	1.7	0.7
	1999	0.5	1.1	0.8
	2000	0.3	1.4	0.7
STAR LAKE INLET				
	1995	1.3	2.2	1.7
	1996	1.0	2.3	1.6
	1997	0.5	1.5	0.9
	1998	0.9	2.0	1.4
	1999	0.8	5.7	2.4
	2000	0.6	1.4	1.0